Manitoba Monthly Surveillance Unit Report
Reported up to July 31, 2010

Highlights:

1. **Antimicrobial Resistant Organisms**
   Together Methicillin-resistant *Staphylococcus aureus* (MRSA) and *Clostridium difficile* (*C. difficile*) accounted for 67% of all non-STBBI related communicable diseases reported to Manitoba Health during July 2010.

   - The number of reported cases of MRSA was above the statistically expected range in July 2010 – 339 positive lab-confirmed cases reported; less than 318 expected in an average month.

2. **Sexually Transmitted & Blood-Borne Infections (STBBI)**
   There were 541 reported cases of sexually transmitted infections (chlamydia, gonorrhoea, and syphilis) in July 2010:
   - 455 reported cases of chlamydia (Ct) only
   - 43 reported cases of gonorrhoea (GC) only
   - 38 reported co-infections of Ct and GC and
   - 5 reported cases of syphilis

   Chlamydia has the highest incidence of reported STBBI. Females between the ages of 15 and 24 years comprised 48% of all reported chlamydia cases in the province.

   The five syphilis cases in July 2010 include both infectious and non-infectious cases, as well as those requiring further follow-up to determine their status.

   In July 2010, there were no cases of Hepatitis B virus (HBV), 32 cases of Hepatitis C virus (HCV) and 21 cases of HIV newly reported in Manitoba.

3. **Other Communicable Diseases**
   The number of reported cases in July 2010 was within or below the statistically expected range for these reported communicable diseases with the exception of the following diseases:

   - Haemophilus Influenzae (CSF) – 1 positive lab-confirmed case reported; less than 1 expected in an average month.
   - Hemolytic Uremic Syndrome – 1 positive lab-confirmed case reported; less than 1 expected in an average month.
   - Meningococcemia (blood) – 1 positive lab-confirmed case reported; less than 1 expected in an average month.
   - Pertussis – 8 positive lab-confirmed cases reported; less than 7 expected in an average month.

- Shigellosis – 5 positive lab-confirmed cases reported; less than 4 expected in an average month.
- Strongyloides – 3 positive lab-confirmed cases reported; less than 2 expected in an average month.
- Trypanosoma cruzi – 3 positive lab-confirmed cases reported; less than 2 expected in an average month.
- Typhoid – 1 positive lab-confirmed case reported; less than 1 expected in an average month.

The expected number of cases and range is statistically based on the number of reported cases during June, July, and August, 2005-2009.

Explanatory Notes:

General:

Each monthly communicable disease report includes the number of cases of notifiable communicable diseases reported by lab or health provider during each individual month. Data for the monthly summary are aggregated based on the earliest of: symptom onset date, specimen collection date, or report date. For the majority of cases, the date used will be the specimen collection date as symptom onset date is frequently not recorded. Some discrepancy of numbers may be based on reporting delays.

The observed numbers of cases are compared to the statistically expected range for each reportable communicable disease. This involves comparing the current month's case counts to the average case counts for the same month, one month subsequent and one month prior for the previous five years. These same months over the five years are used to determine the expected range of cases using the statistical calculation of standard deviation. Using this specific monthly pattern allows for adjustment within the statistics for both seasonality and cyclical disease patterns.

The year-to-date case counts are based on the calendar year.

The disease data reported in the monthly report has not been analyzed for severity or associated deaths at this time.

Disease specific information:

Methicillin-resistant *Staphylococcus aureus* (MRSA) positive results within Manitoba include both individuals who are symptomatic of infection and colonized individuals who have no symptoms and are mostly diagnosed during admission screening activities at facilities. If facilities increase their screening activities, it would usually result in a rise in colonized MRSA cases.

A new case of Hepatitis C Virus (HCV) infection is defined as a first positive test for an identifiable individual.

A new case of Human Immunodeficiency Virus (HIV) infection is defined as a positive test with a unique code that has not been previously linked to a positive test result in Manitoba. Positive HIV tests included in this month's statistics include both nominal and non-nominal testing results.

The number of Tuberculosis cases year-to-date may not equal the sum of cases reported for each month of this year. As new test results are received, there may be a change in diagnosis. Occasionally, diagnosis dates are updated, which also contributes to total numbers varying from month to month.

SUMMARY OF COMMUNICABLE DISEASE FOR July 2010

		MONTHLY TOTAL				YEAR-TO-DATE	
ICD9	DISEASE/INFECTION	2009	2010	Expected*	Ex. Range**	2009	2010
006.9	AMEBIASIS		3	3	0-7	25	24
022	ANTHRAX				***		
127.0	ASCARIASIS			0	0-1		1
005.8	B. CEREUS			0	0-2	2	
320.1	BAC. MENINGITIS - PNEUM	1		0	0-1	3	
320.7	BAC.MENINGITIS-LISTERIA				***		
038.0	BETA STREP SEPTICEMIA	16	11		***	96	77
116.0	BLASTOMYCOSIS	1	2		***	4	5
005.1	BOTULISM				***		
023	BRUCELLOSIS			0	0-1	1	
005.2	C. PERFRINGENS			0	0-1	2	
008.43	CAMPYLOBACTER	27	22	26	14-38	131	126
558.2	CLOSTRIDIUM DIFFICILE	70	64		***	508	532
046.1	CREUTZFELD-JACOB DISEASE				***	2	
007.8	CRYPTOSPORIDIOSIS	3	1	6	0-22	13	7
061.0	DENGUE FEVER			0	0-0		
065.4	DENGUE HEMORRHAGIC FEVER			0	0-0		
V02.4	DIPH.CARRIERS			0	0-1	1	6
032	DIPHTHERIA CASES			0	0-0		4
123.4	DIPHYLLOBOTHRIUM SPP		3	1	0-4	1	6
008.0	E. COLI-VEROTOXIGENIC	5	3	11	0-37	22	28
054.3	ENCEPHALITIS			0	0-1		
005.9	FOOD POISONING OTHER			0	0-1		
007.1	GIARDIA LAMBLIA	10	6	15	6-24	68	63
320.0	H.INFLUENZAE (CSF)		1	0	0-0		1
041.5	H.INFLUENZAE (OTHER STERILE)			0	0-1	2	
041.59	HAEM. INFLUENZAE (non-B)				***	1	
480.8	HANTA VIRUS			0	0-0		
283.11	HEMOLYTIC UREMIC SYNDROME		1	0	0-0		1
070.1	HEPATITIS A	1		1	0-3	11	2
070.3	HEPATITIS B			0	0-1	3	
070.51	HEPATITIS C	30	32	28	17-39	217	185
487.1A	INFLUENZA A****	2			***	88	
487.1B	INFLUENZA B				***	38	
482.83	LEGIONELLA		1	0	0-1		4
085.9	LEISHMANIASIS			0	0-0		
030.9	LEPROSY			0	0-1		
027.0	LISTERIA MONOCYTOGENES	1		0	0-1	2	1
088.81	LYME DISEASE			1	0-4		
084	MALARIA		1	1	0-5	7	7
055.9	MEASLES			0	0-0		1
036.0	MENINGOCOCCAL CSF			0	0-1		
036.82	MENINGOCOCCAL ARTHROPATHY				***		2
036.2	MENINGOCOCCEMIA BLOOD		1	0	0-0		4
B95.6	MRSA	236	339	193	69-317	1345	1804
072.9	MUMPS		1	1	0-3	5	2
036.89	N.MENINGITIDIS OTHER			0	0-1	4	
728.86	NECROTIZING FASCIITIS			2	0-6	3	8
729.1	NECROTIZING MYOSITIS				***		
323.9	OTHER ENCEPHALITIS			0	0-0		
033.1	PARAPERTUSSIS				***		
033.0	PERTUSSIS	2	8	2	0-6	19	35
038.2	PNEUM. SEPTICEMIA	5	7	8	1-15	71	87
073.9	PSITTACOSIS			0	0-0		

* Mean of 15 month totals, from previous, comparable and subsequent months for the past 5 years

** Mean +/- 2 standard deviations of

*** Data collected for less than 5 years.

**** Excludes Influenza A Pandemic H1N1 (pH1N1). There were no cases of pH1N1 in July 2010.

SUMMARY OF COMMUNICABLE DISEASE FOR July 2010

		MONTHLY TOTAL				YEAR-TO-DATE	
ICD9	DISEASE/INFECTION	2009	2010	Expected*	Ex. Range**	2009	2010
083.0	Q FEVER			0	0-0	1	4
082.0	RICKETTSIA RICKETTSII		1		***		1
056.9	RUBELLA			0	0-0	2	2
771.0	RUBELLA CONGENITAL			0	0-0		
041.2	S.PNEUM.OTHER	1	1	1	0-3	4	11
003.0	SALMONELLA	22	24	19	8-30	145	137
120	SCHISTOSOMIASIS			0	0-1		
004	SHIGELLOSIS	2	5	1	0-3	16	20
050.9	SMALLPOX				***		
005.0	STAPH FOOD POISON			0	0-0		
785.5	STAPH TOXIC SHOCK				***		
481.9	STREP PNEUMONIA - PR			0	0-1		
041.1	STREP PYOGENES - OTHER	17	12		***	55	52
711.0	STREP.PNEUM.ARTHRITIS			0	0-0		
580.0	STREPT GLOMERULONEPHRITIS			0	0-0		
040.89	STREPT TOXIC SHOCK			0	0-0		
481	STREPTOCOCCUS PNEUMONIAE			0	0-1		
127.2	STRONGYLOIDES	1	3	0	0-1	5	10
037	TETANUS			0	0-1		1
130.9	TOXOPLASMOSIS			0	0-1	1	2
124	TRICHINOSIS			0	0-0		
086	TRYPANOSOMA CRUZI		3	0	0-1		3
013	TUBERCULOSIS - NON-RESP.	4	3	2	0-6	15	24
010	TUBERCULOSIS - PRIM.		1	1	0-3	6	4
011	TUBERCULOSIS - RESP	8	7	9	3-15	69	54
021.9	TULAREMIA			0	0-1	1	1
002.0	TYPHOID		1	0	0-0	1	2
081.9	TYPHUS			0	0-0		
B96.8	VANCOMYCIN R. ENTEROCOCCI	12	29		***	44	190
005.4	VIBRIO PARAHAEMOLYTICUS		1		***		1
070.59	VIRAL HEP. OTHER		1		***		2
B95.7	VRSA			0	0-0		
062.1	W. EQUINE ENCEPHALITIS			0	0-0		
066.41	WNV NEUROLOGICAL				***		
008.44	YERSINIA ENTEROCOLITICA	2		1	0-3	4	4
		479	**599**			**3064**	**3548**

* Mean of 15 month totals, from previous, comparable and subsequent months for the past 5 years
** Mean +/- 2 standard deviations of
*** Data collected for less than 5 years.

SUMMARY OF COMMUNICABLE DISEASE BY AGE AND GENDER FOR JULY 2010

		<1		1-4		5-9		10-14		15-19		20-24		25-29		30-39		40-49		50-59		60-69		70-79		80+		Missing Age/Gender	Total
ICD9	Disease Name	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M		
006.9	AMEBIASIS										1	1		1															3
038.0	BETA STREP SEPTICEMIA					1						1				1	1		1	2		1		1		1	1		11
116.0	BLASTOMYCOSIS																1		1										2
008.43	CAMPYLOBACTER			1	2			1			4	1		2	3	1		1	1	1			3				1		22
558.2	CLOSTRIDIUM DIFFICILE						2								2	1		2		4	9	5	3	10	5	13	8		64
007.8	CRYPTOSPORIDIOSIS					1																							1
123.4	DIPHYLLOBOTHRIUM													1				1					1						3
008.0	E. COLI 0157			1	1												1												3
007.1	GIARDIA LAMBLIA			1	2		1		1									1											6
320.0	H. INFLUENZAE (CSF)				1																								1
283.11	HEMOLYTIC UREMIC SYNDROME																									1			1
070.51	HEPATITIS C											2	1	3	1	3	3	2	8	2	3			2				2	32
070.59	HEPATITIS OTHER (VIRAL)																				1								1
482.83	LEGIONELLA																					1							1
084	MALARIA									1																			1
036.2	MENINGOCOCCEMIA(MGCCEMIA											1																	1
B95.6	MRSA	10	4	22	18	17	14	9	11	14	10	19	8	11	9	28	29	17	22	9	10	11	13	3	7	8	6		339
072.9	MUMPS			1																									1
033.0	PERTUSSIS	1	2	1		1			1		1																1		8
038.2	PNEUM. SEPTICEMIA			1													1	2			1		1				1		7
082.0	RICKETTSIA RICKETTSII													1															1
003.0	SALMONELLA	1				2	2	2			2	1			1	1	1	1		2	3	1	1		1	1	1		24
004	SHIGELLOSIS					1		2									1			1									5
041.1	STREP PYOGENES - OTHER ST	1												1		2	1	2	1		2	2							12
041.2	STREP.PNEUM.OTHER																			1									1
127.2	STRONGYLOIDIASIS								1						1			1											3
086	TRYPANOSOMIASIS														1				2										3
013	TUBERCULOSIS - NON-RESP.											1				1						1							3
010	TUBERCULOSIS - PRIM.				1																								1
011	TUBERCULOSIS - RESP												1	1			2		1		1					1			7
002.0	TYPHOID																			1									1
B96.8	VANCOMYCIN RES. ENTER.			1								1						3	2		4	2	4	2	4	3	3		29
005.4	VIBRIO PARAHAEMOLYTICUS																		1										1
		13	6	29	25	23	19	14	14	15	18	28	10	21	18	38	41	33	40	23	34	24	26	18	17	28	22		599

SUMMARY OF COMMUNICABLE DISEASE BY REGION (RHA) FOR JULY 2010

ICD9	Disease/Infection	Winnipeg	Brandon	N. Eastman		S. Eastman		Interlake		Central		Assiniboine		Parkland		Norman		Burntwood		Churchill	OOP**	Missing	TOTAL
*Case Referred to:**				*F*	*P*	*F*	*P*	*F*	*P*	*F*	*P*	*F*	*P*	*F*	*P*	*F*	*P*	*F*	*P*				
006.9	AMEBIASIS	2	1																				3
038.0	BETA STREP SEPTICEMIA	7		1					1				1					1					11
116.0	BLASTOMYCOSIS	1					1																2
008.43	CAMPYLOBACTER	9					6		1		2		2		1				1				22
558.2	CLOSTRIDIUM DIFFICILE	35	6				3		4		5		8		1		1		1				64
007.8	CRYPTOSPORIDIOSIS												1										1
123.4	DIPHYLLOBOTHRIUM	2									1												3
008.0	E. COLI 0157	1									1		1										3
007.1	GIARDIA LAMBLIA	4					2																6
320.0	H. INFLUENZAE (CSF)																		1				1
283.11	HEMOLYTIC UREMIC SYNDROME						1																1
070.51	HEPATITIS C	21	1					1	2		3				1				2		1		32
070.59	HEPATITIS OTHER (VIRAL)	1																					1
482.83	LEGIONELLA	1																					1
084	MALARIA	1																					1
036.2	MENINGOCOCCEMIA(MGCCEMIA	1																					1
B95.6	MRSA	103	3	12	7		3		8	1	5	4	2	3	5		11	165	5	2			339
072.9	MUMPS										1												1
033.0	PERTUSSIS																	8					8
038.2	PNEUM. SEPTICEMIA	5									1						1						7
082.0	RICKETTSIA RICKETTSII	1																					1
003.0	SALMONELLA	11	3		1		1		1		1	1			1		2	1	1				24
004	SHIGELLOSIS	2	1															2					5
041.1	STREP PYOGENES - OTHER ST	7		2				1							1			1					12
041.2	STREP.PNEUM.OTHER	1																					1
127.2	STRONGYLOIDIASIS	3																					3
086	TRYPANOSOMIASIS	2					1																3
013	TUBERCULOSIS - NON-RESP.	3																					3
010	TUBERCULOSIS - PRIM.	1																					1
011	TUBERCULOSIS - RESP	3										1						3					7
002.0	TYPHOID	1																					1
B96.8	VANCOMYCIN RES. ENTER.	22					1		2								2	1	1				29
005.4	VIBRIO PARAHAEMOLYTICUS						1																1
		251	15	15	8		20	2	19	1	20	6	15	3	10		17	182	12	2	1		**599**

* F=Federal Jurisdiction (First Nations and Inuit Health); P=Provincial Jurisdiction

** OOP=Out of Province

STBBI Infection Summary Report - July 2010

	MONTHLY TOTAL		YEAR-TO-DATE	
DISEASE/INFECTION	**2009**	**2010**	**2009**	**2010**
All Chlamydia Infections	468	493	3836	3769
All Gonorrhea Infections (including PRNG)	74	81	671	575
All Syphilis Infections*	6	5	30	40
Gonorrhea & Chlamydia Co-infections	34	38	282	257
HIV	14	21	67	81

Total Number of STBBI Cases by Age and Gender - July 2010

	<1		1-4		5-9		10-14		15-19		20-24		25-29		30-39		40-49		50-59		60-69		70-79		80+		Missing	
Disease Name	**F**	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**age/gender**	**TOTAL**
Chlamydia Only Cases							5		112	32	108	58	36	43	30	23	2	2		2		1				1		455
Gonorrhea Only Cases									6		8	2	9	1	5	6		4		1		1						43
Syphilis Only Cases													1	1			1	2										5
GC and CT Cases									9	2	6	3	5	2	1	5	1	2		2								38
TOTAL							5		127	34	122	63	51	47	36	34	4	10		5		2				1		541
HIV											1		2		1	5	2	6		4								21

Regional STBBI Distribution - July 2010

Disease/Infection	**Winnipeg**	**Brandon**	**N. Eastman**		**S. Eastman**		**Interlake**		**Central**		**Assiniboine**		**Parkland**		**Norman**		**Burntwood**		**Churchill**	**OOP*** **	**Missing**	**TOTAL**
Case Referred to: **			***F***	***P***	***F***	***P***	***F***	***P***	***F***	***P***	***F***	***P***	***F***	***P***	***F***	***P***	***F***	***P***				
All Chlamydia Infections	251	23	13	4		3	16	8		18		6	6	10	9	14	83	23	1	5		493
All Gonorrhea Infections	39		5			1				4	1	1		1	3	1	20	4		1		81
All Syphilis Infections	4									1												5
GC and CT Infections	17		2							1				1	2		12	3				38

* The 5 cases in July 2010 include both infectious and non-infectious cases, as well as those requiring further follow-up to determine their status.

** F=Federal Jurisdiction (First Nations and Inuit Health); P=Provincial Jurisdiction

*** OOP=Out of Province